

# United States Patent and Trademark Office

| APPLICATION NO.            | FII                   | LING DATE  | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.          | CONFIRMATION NO. |
|----------------------------|-----------------------|------------|----------------------|------------------------------|------------------|
| 10/759,705                 | 10/759,705 01/15/2004 |            | Billy Keefer         | 17646-112001 / 20000244 8442 |                  |
| 26231                      | 7590                  | 05/23/2006 | EXAMINER             |                              | INER             |
| FISH & RIC<br>P.O. BOX 10  |                       | ON P.C.    | TANG, KAREN C        |                              |                  |
| MINNEAPOLIS, MN 55440-1022 |                       |            |                      | ART UNIT                     | PAPER NUMBER     |
|                            | ,                     |            | 2151                 |                              |                  |
|                            |                       |            |                      |                              |                  |

DATE MAILED: 05/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|  |   | Application No.                      | Applicant(s)                |  |  |  |  |
|--|---|--------------------------------------|-----------------------------|--|--|--|--|
|  |   | 10/759,705                           | KEEFER ET AL.               |  |  |  |  |
|  | Office Action Summary   | Examiner                             | Art Unit                    |  |  |  |  |
|  |   | Karen C. Tang                        | 2151                        |  |  |  |  |
|  | The MAILING DATE of this communication ap   | <u> </u>                             |                             |  |  |  |  |
|  | Period for Reply  |                                      |                             |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |   |                                      |                             |  |  |  |  |
| Status   |   |                                      |                             |  |  |  |  |
| 1)[\]  | Responsive to communication(s) filed on 27 /  | March 2006                           |                             |  |  |  |  |
| ·  | This action is <b>FINAL</b> . 2b)⊠ This action is non-final.  |                                      |                             |  |  |  |  |
|  | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is |                                      |                             |  |  |  |  |
|  | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.                       |                                      |                             |  |  |  |  |
| Dispositi  | on of Claims  |                                      |                             |  |  |  |  |
| 4)🖾  | 4)⊠ Claim(s) <u>1-27</u> is/are pending in the application.   |                                      |                             |  |  |  |  |
|  | 4a) Of the above claim(s) is/are withdrawn from consideration.  |                                      |                             |  |  |  |  |
| 5)   | 5) Claim(s) is/are allowed.   |                                      |                             |  |  |  |  |
| 6)⊠  | Claim(s) <u>1-27</u> is/are rejected.   |                                      |                             |  |  |  |  |
| 7)   | Claim(s) is/are objected to.  |                                      |                             |  |  |  |  |
| 8)   | Claim(s) are subject to restriction and/o   | or election requirement.             |                             |  |  |  |  |
| Applicati  | on Papers   |                                      |                             |  |  |  |  |
| 9) 🔲 🤈   | The specification is objected to by the Examin  | er.                                  |                             |  |  |  |  |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.   |   |                                      |                             |  |  |  |  |
|  | Applicant may not request that any objection to the   | drawing(s) be held in abeyance. See  | 37 CFR 1.85(a).             |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |   |                                      |                             |  |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |   |                                      |                             |  |  |  |  |
| Priority u   | nder 35 U.S.C. § 119  |                                      |                             |  |  |  |  |
| <ul> <li>12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) ☐ All b) ☐ Some * c) ☐ None of:</li> <li>1. ☐ Certified copies of the priority documents have been received.</li> </ul>   |   |                                      |                             |  |  |  |  |
|  | 2. Certified copies of the priority documents have been received in Application No                              |                                      |                             |  |  |  |  |
|  | 3. Copies of the certified copies of the priority documents have been received in this National Stage           |                                      |                             |  |  |  |  |
|  | application from the International Bureau (PCT Rule 17.2(a)).   |                                      |                             |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.   |   |                                      |                             |  |  |  |  |
|  |   |                                      |                             |  |  |  |  |
| Attachment   |   | <b>0</b> □ •                         | (070, 440)                  |  |  |  |  |
| 2) Notic   | e of References Cited (PTO-892)<br>e of Draftsperson's Patent Drawing Review (PTO-948)                          | 4)                                   | nte                         |  |  |  |  |
| 3) 🔲 Inform  | nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08<br>r No(s)/Mail Date                                      | 5) Notice of Informal P<br>6) Other: | atent Application (PTO-152) |  |  |  |  |

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#### **DETAILED ACTION**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.1 14, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.1 14. Applicant's submission filed on 3/27/06 has been entered.

- Claims 1-27 are presented for further examination.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-27 are rejected under 35 U.S.C. 103(a) as being obvious over Scarpelli et al hereinafter Scarpelli (US 6,816,898) in view of Lavian et al hereinafter Lavian (US 6,842,781).

- 1. Referring to Claims 1 and 9, Scarpelli teaches a system for agent-based monitoring of network devices in an enterprise network with means for:
- a. Selecting a network device from the enterprise network (fig 6a, 7, Col 8, Lines 20-22). Note that the user sets up a monitor agent for a particular device, each network device having characteristics (Col 5, Lines 30-55).

b. Selecting an agent template based on the one or more of the selected network device (Col 7, Lines 14-27; fig 6a, 7),

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c. Instantiating an agent object from the object class of the agent template, the instantiated agent object operable to monitor hardware characteristics of the network device (Col 7, Lines 22-27; Col 8, Lines 55-67).

Scarpelli did not expressly indicate the agent template based on one or more characteristics of the selected network device and the templates comprising the hierarchy of object classes, wherein each object class corresponds to a possible combination of the characteristics of the selected network device.

Lavian disclosed the agent template (object-oriented method, refer to Col 5, Lines 40-55) based on one or more characteristics of the selected network device (parameters from the network devices, refer to Col 5, Lines 40-55) and the templates comprising the hierarchy of object classes (JAVA comprising hierarchy of object classes/methods), wherein each object class corresponds to a possible combination of the characteristics of the selected network device (each parameters cause possible combination of characteristics of selected network devices.).

Given the teaching of Lavian, a person having ordinary skill in the art would have recognized the desirability and advantages of modifying Scarpelli by associating the network device with a MIB parameter. This benefits the system by allowing the user to quickly look up the device by type in the structured database.

2. Referring to Claims 4, 12, and 20, Scarpelli teaches all the limitations as applied to claims 1, 9, and 17, respectively. They further teach means wherein monitoring comprising retrieving

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information associated with one or more of the hardware characteristics of the network device (Col 5, Lines 30-55).

- 3. Referring to Claims 5, 13, and 21, Scarpelli disclosed all the limitations as applied to claims 4, 12, and 20 respectively. They further teaches that wherein the hardware characteristics of the network device including one or more of: memory usage; chassis temperature; Central Processing Unit (CPU) usage; fan status; module status; and power supply status (Col 5, Lines 30-55).
- 4. Referring to Claims 6, 14, and 22, Scarpelli disclosed all the limitation as supplied to claims 4, 12, 20, respectively. Scarpelli also disclosed wherein monitoring includes comparing a threshold value to the retrieved information associated with one or more of the hardware characteristics (refer to Col 6, Lines 1-15, to detect problems, there are preset values to compare in order to know the problem exist within the system and Col 7, Lines 1-12).
- 5. Referring to Claims 7, 15, and 23, Scarpelli disclosed all the limitations as applied to claims 6, 15, and 22, respectively. They further teach means for automatically communicating an alert in response to the hardware characteristics violating the threshold value (Col 7, Lines 1-12 and Col 6, Lines 1-15).
- 6. Referring to Claims 8, 16, and 24, Scarpelli disclosed all the limitations as applied to claims 1, 9, and 17, respectively.

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Scarpelli did not expressly disclosed wherein the hierarchy of object classes includes a plurality of parent objects and at least one child object associated with each of the parent objects. The parent objects corresponding to different embodiments of a first characteristic of the network device and each child object being associated with different embodiments of a second characteristic and the embodiment of the first characteristic that corresponds to the parent object associated with the child object.

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Lavian disclosed wherein the hierarchy of object classes (Java comprising hierachy's of classes refer to Col 7, Lines 30-50 and Col 5, Lines 20-55) includes a plurality of parent objects and at least one child object (methods) associated with each of the parent objects. The parent objects corresponding to different embodiments of a first characteristic of the network device and each child object being associated with different embodiments of a second characteristic and the embodiment of the first characteristic that corresponds to the parent object associated with the child object (This limitation is the fundamentals of JAVA programming languages, which the parents and child are associated with each other and the parent and child are associated/processing different characteristics).

Given the teaching of Lavian, a person having ordinary skill in the art would have recognized the desirability and advantages of modifying Scarpelli by associating the network device with a MIB parameter. This benefits the system by allowing the user to quickly look up the device by type in the structured database.

7. Referring to Claims 17, Scarpelli disclosed a system for agent-based monitoring of network devices in an enterprise network comprising:

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memory operable to store information associated with a plurality of network devices in the enterprise network (Col 6, Lines 55-59), the information stored in the memory comprising characteristics of each of the plurality of network devices (Col 5, Lines 30-55); and one or more processors collectively operable to:

- a. Selecting a network device from the enterprise network (fig 6a, 7, Col 8, Lines 20-22). Note that the user sets up a monitor agent for a particular device, each network device having characteristics (Col 5, Lines 30-55).
- b. Selecting an agent template based on the one or more of the selected network device (Col 7, Lines 14-27; fig 6a, 7),
- c. Instantiating an agent object from the object class of the agent template, the instantiated agent object operable to monitor hardware characteristics of the network device (Col 7, Lines 22-27; Col 8, Lines 55-67).

Scarpelli did not expressly indicate the agent template based on one or more characteristics of the selected network device and the templates comprising the hierarchy of object classes, wherein each object class corresponds to a possible combination of the characteristics of the selected network device.

Lavian disclosed the agent template (object-oriented method, refer to Col 5, Lines 40-55) based on one or more characteristics of the selected network device (parameters from the network devices, refer to Col 5, Lines 40-55) and the templates comprising the hierarchy of object classes (JAVA comprising hierarchy of object classes/methods), wherein each object class corresponds to a possible combination of the characteristics of the selected network device (each parameters cause possible combination of characteristics of selected network devices.).

Given the teaching of Lavian, a person having ordinary skill in the art would have recognized the desirability and advantages of modifying Scarpelli by associating the network device with a MIB parameter. This benefits the system by allowing the user to quickly look up the device by type in the structured database.

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- 8. Referring to Claim 25, Scarpelli disclosed a method for agent based monitoring of switches in an enterprise network with means for;
- a. Selecting one of the switches from the enterprise network (fig 6a, 7, Col 8, Lines 20-22). Note that the user sets up a monitor agent for a particular switch (Col 5, Lines 5-20), each network switch having characteristics (Col 5, Lines 30-55).
- b. Selecting an agent template based on the one or more of the selected switch (Col 7, Lines 14-27; fig 6a, 7),
- c. Instantiating an agent object from the object class of the agent template, the instantiated agent object operable to monitor hardware characteristics of the switch (Col 7, Lines 22-27; Col 8, Lines 55-67).

Scarpelli did not expressly indicate the agent template based on one or more characteristics of the selected switch and the templates comprising the hierarchy of object classes, wherein each object class corresponds to a possible combination of the characteristics of the selected switch (Col 5, Lines 5-20).

Lavian disclosed the agent template (object-oriented method, refer to Col 5, Lines 40-55) based on one or more characteristics of the selected network device (parameters from the network devices, refer to Col 5, Lines 40-55) and the templates comprising the hierarchy of object classes

(JAVA comprising hierarchy of object classes/methods), wherein each object class corresponds to a possible combination of the characteristics of the selected network device (each parameters cause possible combination of characteristics of selected network devices.).

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Given the teaching of Lavian, a person having ordinary skill in the art would have recognized the desirability and advantages of modifying Scarpelli by associating the network device with a MIB parameter. This benefits the system by allowing the user to quickly look up the device by type in the structured database.

9. Referring to Claims 2, 10, and 18, although the system disclosed by Scarpelli (as applied to claims 1, 9, and 17, respectively) shows substantial features of the claimed invention, it fails to disclosed the network device associated with at least one Management Information Base (MIB) parameter.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Scarpelli and evidence by Lavian.

In an analogous art, Lavian disclosed a system for remote management of devices in a network wherein the network device is associated with at least one Management Information Base (MIB) parameter (Col 4, Lines 20-60).

Given the teaching of Lavian, a person having ordinary skill in the art would have recognized the desirability and advantages of modifying Scarpelli by associating the network device with a MIB parameter. This benefits the system by allowing the user to quickly look up the device by type in the structured database.

10. Regarding Claims 3, 11, and 19, although the system disclosed by Scarpelli shows substantial features of the claimed invention, it fails to disclose the agent object monitoring the network device based on the one or more MIB parameters.

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In an analogous art, Lavian disclosed a system for remote management of devices in a network wherein the agent object monitors the network device based on the one or more MIB parameter (Col 6, Lines 20-60 and Col 5, Lines 5-55)

Given the teaching of Lavian, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Scarpelli by associating the monitoring the network device with a MIB parameter. This benefits the system by allowing the user to quickly look up and configure the agent used for monitoring the device.

## Response to Arguments

Applicant's arguments with respect to claims 1-27 have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

A shortened statutory period for reply to this Office action is set to expire THREE MONTHS from the mailing date of this action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karen C. Tang whose telephone number is (571)272-3116. The examiner can normally be reached on M-F 7 - 3.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571)272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Karen Tang

Khanh Dinh Primary Examiner